

The Citizen Forester

AUGUST 2013

Summer “Insect” Damage on Trees

By Rick Harper We all know that all insects are not pests, but are all pests necessarily insects? The answer, of course, is “no”. During these hot summer months, it can become quite clear that our trees can be challenged by much more than an errant insect or pathogen – they may have to contend with populations of mites.



Spruce spider mite damage on hemlock. Photo Credit: M. Masiuk, [PennState](#).

very small in size (often well under 1mm) and since they may produce many generations in one growing season, their populations may actually “build” as environmental conditions permit. Females may lay up to hundreds of eggs, and feeding occurs via piercing-sucking mouthparts, where the pest

Mites are not actually insects, but are much more closely related to spiders (class: Arachnida), as they can actually spin small silken webs and feature eight legs in their mature stages. They are

spruce (*Picea* spp.), pine (*Pinus* spp.), arborvitae (*Thuja occidentalis*), and hemlock (*Tsuga* spp.). Since much of its feeding and reproduction activity may occur in the spring and the fall, it is known as a “cool season” mite.

Damage from high populations of SSM may be somewhat delayed and not visually evident until the hot summer months (i.e., right now). Since adults are most active when daytime temperatures are below 80 degrees Fahrenheit, long cool spring and fall seasons are when this arthropod can thrive and reproduce at a very high rate, as it feeds on last season’s growth. In preparation for winter, adult females may lay eggs on the bark of the branches of the host plant itself, starting in late summer/early fall.



Two-spotted spider mite. Photo Credit: M. Masiuk, [PennState](#).

TSSM has a very wide host range and may be a pest of urban deciduous trees and shrubs. Though this arthropod may feed throughout the growing season, it blossoms when daytime temperatures reach at least 85 degrees Fahrenheit – hence the phrase “warm season” mite. In these hotter summer months, development is hastened and several generations may be produced in a short period of time. Damage from TSSM is also evident during mid-summer months, and, like SSM, includes stippling, chlorosis, and under severe circumstances, leaf drop and plant death.



Two-spotted spider mite. Photo Credit: M. Masiuk, [PennState](#).

The most important strategy relative to a mite-related problem is prevention. Keeping plants well watered to preclude drought stress – especially during the hot sum-

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Though an entire array of literally hundreds of species of mites may be found in our urban landscapes, two types often tend to be the focus of concern: spruce spider mite (*Oligonychus ununguis*) (SSM) and two-spotted spider mite (*Tetranychus urticae*) (TSSM).

SSM is a pest of coniferous trees in the urban environment, including

Summer “Insect” Damage

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mer months – and routinely monitored to identify a problem at its earliest stage are of critical importance. Mites are subject to the same pressures that other organisms are (i.e., predation from insects/arthropods;

hostile environmental conditions; viral or fungal pathogens) and populations naturally ebb and flow. Additionally, there are many mites that aren't considered to be pests that may even enhance the ornamental appeal of some of our plants!

If you suspect a mite-related situation on one of your urban trees, take a piece of white paper, hold it under a branch and tap the twig several times – you may be able to shake loose some mites and actually watch them crawling around with the help of a hand lens. If you suspect populations may be high enough to be problematic, submit a sample to the UMass Extension Diagnostic Lab: <http://ag.umass.edu/services/plant-problem-diagnostics>.

Reference:

Johnson, W.T., and H.H. Lyon. 1994. *Insects That Feed on Trees and Shrubs*. 2nd Ed. Rev. Cornell University Press, Ithaca, New York, U.S.

Rick Harper serves as Extension Assistant Professor of Urban & Community Forestry, UMass Department of Environmental Conservation, Amherst, and is also an ISA Board-Certified Master Arborist.



An innocuous felt-like leaf gall on river birch caused by an eriophyid mite. Photo Credit: S. Katovich, USDA, www.forestryimages.org.

DCR Tree Steward Training

October 25-26, Harvard Forest, Petersham, MA

The 2013 DCR Tree Steward Training will take place Friday, October 25, to Saturday, October 26, at the **Harvard Forest in Petersham**. At this year's session: learn about tree biology, benefits, preserving trees during construction, tree planting, i-Tree (extended session), working with your utility arborist, pruning, tree ID (extended session), and funding urban forestry programs and participate in a roundtable discussion on working with trees and people in your community.

We'll have a mix of indoor and outdoor sessions.

Registration is now available on the [DCR Urban and Community Forestry website](http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/branching-out-additional-programs.html) (<http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/branching-out-additional-programs.html>)

Deadline to register: October 15.



Tree City USA

We'd like to recognize the Town of Duxbury as a 2012 Tree City USA. This year marks Duxbury's 22nd year of being a Tree City USA community.

We'll have the 2013 application information available this fall. If you are interested in applying to become a Tree City USA, contact Mollie Freilicher, mollie.freilicher@state.ma.us or 413-577-2966.

Species Spotlight—Sweetgum, *Liquidambar styraciflua*

By Mollie Freilicher
MA-DCR
Community Action Forester

Once stepped on barefoot, the brown, dried-up fruit of the sweetgum is hard to forget.

Growing up in Maryland, I was keenly aware of the sweetgums in my friend Pablo's yard, and we were always hard pressed, when playing in the spring, to avoid stepping on the gumballs. Despite its pedal issues, I have come to love sweetgum. Sweetgum is in the witch-hazel family (Hamamelidaceae) and is found growing from the mid-Atlantic states, south to Florida, west to Texas, and north to southern Ohio and Indiana. It grows in USDA hardiness zones five to nine. Despite a similar common name, sweetgum is not related to black gum (*Nyssa sylvatica*). Sweetgum thrives in moist soils and lower slopes of woodlands. In southern parts of its range, sweetgum is often one of the first trees to colonize clearings and floodplains. It can reach heights of 60 to 75 feet, with a spread that is two-thirds its height. Its form is pyramidal when young, and develops a rounded or oblong crown with maturity.



The leaves of sweetgum are alternate, glossy green above, and paler below. They are somewhat "star shaped" with five to seven serrated lobes, reminiscent of maple leaves. The fall color of sweetgum can range from yellow to red and can be striking. The bark of



sweetgum is gray and deeply furrowed. The twigs are gray to yellowish-brown, and young twigs often have corky wings. The buds are imbricate and diverge from the stem. Flowers of sweetgum are monoecious. (Both male and female flowers appear on the same plants.) They are not

showy and appear when the leaves are unfurling and expanding, usually in April or May in our area. Female flowers hang down on a slender stalk with a round head. Male flowers form upright racemes. The fruit is a syncarp (a fleshy aggregate fruit) that matures in autumn and persists



on the tree through winter and even into spring. It hardens and turns brown as it dries.

Furniture, plywood, pulpwood, barrels, veneer, and boxes are all products that come from sweetgum. In the south, where sweetgum is abundant, deer feed on the seeds. Birds, squirrels, and chipmunks also eat the seeds. A resinous gum that sweetgum produces has been used medicinally in Mexico and Europe in the place of storax (which comes from the Turkish sweetgum [*Liquidambar orientalis*]) to treat dysentery and diarrhea. The storax has also been used in adhesives, salves, and perfume. While its use dates back much further, the first written record of the use sweetgum sap comes from the 1500s when Bernal Diaz de Castillo chronicled events concerning Hernán Cortés and Montezuma II in his book,

True History of the Conquest of New Spain. Diaz del Castillo wrote, "After he [Montezuma II] had dined, they presented to him three little canes highly ornamented, containing liquidambar, mixed with an herb they call tobacco. Although he did not inhale much he immediately fell asleep."

Sweetgum prefers full sun and moist, acidic soils. 'Rotundiloba' is one variety with rounded lobes that does not set fruit. Sweetgum makes an ideal specimen tree, alone or in a grouping. The effect of a group of sweetgums in fall color can be stunning. For urban areas, sweetgums come in non-fruiting and low-fruiting varieties, making sweetgum an appropriate tree for streetsides, lawns, and parks.

All photos from [Virginia Tech](#), except for twig showing corky wings: [Stadtkatze](#), flickr.com and form: [UConn Plant Database](#).



Growing Greener—in Amesbury

The Department of Conservation and Recreation, Urban and Community Forestry Program recently awarded the City of Amesbury a National Grid Partnership Grant to plant street trees. The City of Amesbury will partner with the Amesbury Lions Club to plant and maintain 20 shade **trees along Main Street, Beacon Street, and Clark's Road. Volunteers will** plant and maintain the trees in partnership with the Department of Public Works. The goal of the project is to maintain all the newly-planted trees and maintain the partnerships among those involved in the care of the trees, as well as the partnership between the City and the Lions Club.

National Grid Partnership Grants are 75-25 matching grants and are available in communities that National Grid serves. Deadlines for the next round: October 1 (Intent to Apply) and November 1 (Application).

For more information, go to the DCR website: <http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/urban-and-community-forestry-challenge-grants.html>



Market Square, Amesbury.
Amesburycity.com.

Recently Published Trees and Storms

Purdue University has a new publication on trees and storms. The author is Lindsay Purcell, the urban forestry specialist at Purdue Extension. In the publication, Purcell details types of damage from cold and warm weather events. Purcell describes five types of common storm damage: wind throw, stem failure, crown twist, root failure, and branch failure.

Download the publication here: http://www.extension.purdue.edu/extmedia/FNR/FNR-FAQ-12-W.pdf?goback=%2Egde_4583322_member_255924314

Massachusetts Forestry, Best Management Practices Manual, 2nd Edition

This manual contains Best Management Practices (BMPs) for forestry that are required by Mass. General Laws, Ch. 132, as well as guidelines that are not required, but are strongly recommended. To download the BMP Manual, go to: <http://masswoods.net/>.

Growing on Trees

Helping Street Trees Weather Drought

July 15, 2013, College Park, MD – In June, Wichita reported 10,000 urban trees dead as a result of drought.

Indiana's trees are still suffering after last year's long drought and 100-degree days. The summer of 2012 was one of the worst droughts in 50 years. Recent research shows trees feel the drought—and suffer. A team of French scientists have captured the sound that trees **make, their “cry for help,” when they are parched and in need of water.** With another season of dry weather **likely for trees in many communities, here's a roundup of tools for managing drought stress on urban trees.**

Unfortunately, trees may already be under severe trauma from drought before they show it in their leaves, which begin to wilt or yellow, in their roots, or in other signs of distress. By then, the effects of prolonged and severe drought make trees more vulnerable and susceptible to both disease and pests.

Like humans with a healthy immune system, healthy trees can fight off invaders, but not when they are weakened. **Here's more on how researchers are acoustically measuring the impact of drought on trees and what it means:** [Trees Call for Help—And Now Scientists Can Understand.](#)

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Growing on Trees

From the New England Chapter, International Society of Arboriculture

Women's Tree Climbing Workshop—for Beginners

Are you a woman who has always wanted to learn how to climb trees? Have you not had the opportunity to **learn or haven't felt comfortable asking?** This two and a half-day event was created for you!

Come learn the basics and magic of tree climbing. This **year's workshop incorporates climbing gorgeous trees at the Alton Jones Campus of the University of Rhode Island.** You will learn about a multitude of styles in climbing equipment and techniques. Come network with women and female arborists from all over the country and the Northeast! This three-day, overnight adventure is **ALL-INCLUSIVE**, including accommodations and food. You will leave from this climbing experience with a new skill, wonderful memories, new friends, and a sense of personal accomplishment. Check out [photos from last year's workshop](#).

For complete schedule and additional information, check out the [brochure for the workshop](#).

Sponsored by: New England Chapter ISA, Davey Resource Group, Northern Arboriculture LLC, Davey Tree, and an anonymous donor. If you are interested in sponsoring the event, [click here](#).

When: Friday - Sunday, September 20-22, 2013 (Begins 5:00 p.m. Friday – ends 6:00 p.m. Sunday)

Where: Alton Jones Environmental Education Center, 401 Victory Highway, West Greenwich, RI 02817

Cost: \$400 New England ISA Chapter members/\$435 for non-members (includes chapter membership). Limited scholarships are available. Apply for a scholarship by September 1 at:

http://newenglandisa.org/WTCW_scholarship.html

Instructors: Marcy Carpenter, Bear LeVangie, and Melissa LeVangie

Register online or by mail: To register online, [click here](#) (additional fees required). To register by mail, download the registration brochure by [clicking here](#). If registering by mail and applying for a scholarship, be sure to complete the [scholarship form online](#).

Splicing Workshop at Yale Cordage

Sponsored by the New England Chapter ISA and Yale Cordage.

The workshop will begin on Friday, October 4, from 4:00-7:00 p.m., with a tour of the Yale Cordage facility, followed by a networking dinner on-site. (You can expect some delicious local fare!)

One Saturday, October 5, 8:00 a.m.-4:00 p.m., attendees will hit the ground running with two Yale riggers to learn both Single Braid Polyester 12 strand - Yalex and Double Braid - 2 in 1 Polyester - Double Esterlon splices. Attendees will then be able to use Yale Cordage equipment to break-test their creations on-site!

*Due to the fact that there will be proprietary information shared during this workshop, attendees will be required to sign a non-disclosure agreement, and direct competitors of Yale Cordage will not be allowed to attend.

Each participant will go home with a Single Braid Certification Kit (a \$100 value) FREE!

When: Friday-Saturday, October 4-5, 2013

Where: Yale Cordage, Saco, ME

Cost: Member of NEC-ISA: \$150 / Non-Member: \$185 (includes all meals AND a cool t-shirt!)

Continuing Education Credits: Earn 6 ISA CEUs

Hotel: Hampton Inn, Saco, ME

Group Rate for "Yale Cordage": \$104/night
1-207-282-7222

Rates good through Sept 4, 2013

Registration: www.splicingatyale.eventbrite.com

We do our best to ensure that listings are accurate, but please check with program organizers for the most up-to-date information.

Growing on Trees

Town Forests: Past and Present

Celebrating 100 Years of Town Forests

DCR, in cooperation with the Massachusetts Forest Alliance, Bay State Forestry Service, and the USDA Forest Service will host a conference for municipalities, land trusts, natural resource professionals, and community groups on September 28, 2013 in Fitchburg.

What: Conference celebrating 100 years of town forests in Massachusetts

Where: Holiday Inn, 150 Royal Plaza Drive, Fitchburg, MA

When: Saturday, September 28, 8:00 a.m. to 4:00 p.m.

Registration Cost:

Morning Session Only: \$20

Morning Session + Afternoon Field Tour & Beer Tasting: \$30

Student All Day: \$15

Register and get more information at: <http://massforestalliance.org/fitchburg/>

Conference Agenda

7:30am – 8:30am	Registration & Lite Breakfast (Coffee, Tea, Decaf, Danish)
8:30 AM – 9:00 AM	Welcome
	Opening Remarks
	Jennifer Fish, <i>Director of MA Service Forestry Program</i>
	Jeffrey Hutchins, <i>Executive Director – Massachusetts Forest Alliance</i>
	Building Vibrant Cities
	The Honorable Lisa A. Wong, <i>Mayor of Fitchburg Massachusetts</i>
9:00 AM – 9:45AM	The Landscape of Community: A History of Communal Forests in New England
	KEYNOTE SPEAKER: Robert McCullough, <i>Associate Professor, University of Vermont</i>
9:45 AM – 10:15 AM	BREAK
10:15 AM – 11:15 AM	Wildlands & Woodlands
	David B. Kittredge, <i>Professor, University of Massachusetts, Amherst</i>
	Building on Local Stewardship—A Strategy for Massachusetts Forests
	Sean Mahoney, <i>DCR Outreach Service Forester</i>
11:15 AM – 12:30 PM	Forest Stewardship on Municipal Lands in Massachusetts
	Michael Downey, <i>DCR Service Forester</i>
	Mollie Freilicher, <i>DCR Urban & Community Forestry</i>
	Spotlighting Town Forest Success Stories
	"Building Forest Stewardship in Town"—Jennifer Carlino, <i>Town of Norton</i>
	"Outreach & Building Support"—Rob Moore, <i>Conservation Dept. Health Technician, City of Haverhill (tentative)</i> , and
	Michael Barry, <i>Forester, Bay State Forestry Service</i>
	"Reclamation Forestry"—Priscilla Ryder, <i>Conservation Officer, City of Marlborough</i>
	"Growing Partnerships"—Sarah I. LaValley, <i>Conservation, Preservation and Land Use Planner, City of Northampton</i>
	"Public Water & Forestry"—Nicole Sanford, <i>Senior Environmental Scientist, City of Northampton</i> , and Dan Cyr, <i>Forester, Bay State Forestry Service</i>
	Questions, Closing Remarks, Evaluations and CEUs
	Jennifer Fish, <i>Director of MA Service Forestry Program</i>
12:30 PM – 1:30 PM	LUNCH
1:30 PM – 1:45 PM	Board Buses and Depart for Field Tour
2:45pm – 4:00pm	FIELD TOUR
	City of Fitchburg Water Department Forest Tour (led by Bay State Forestry Service)
	FIELD TOUR
	Pinetree Power Fitchburg, Inc. (coordinated by Massachusetts Forest Alliance)
4:00 PM	Beer Tasting sponsored by Wachusett Brewing Company, Westminster, MA

Growing on Trees

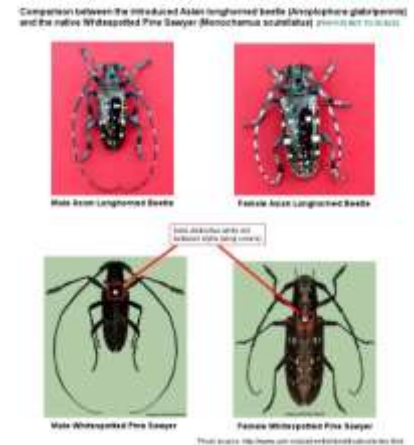


Be on the lookout for invasive pests!

August is Tree Check Month!

Have you checked your trees for invasive wood-boring beetles?

Asian Longhorned Beetle and Emerald Ash Borer are two invasive insects threatening trees throughout Massachusetts. Your help is needed to prevent their spread. Take just 10 minutes this month to check your trees for beetles and signs of damage; find out how at <http://bit.ly/treecheck>. After you've checked your trees, email stacy.kilb@state.ma.us and we'll send you a free sticker or a button!



Trapping Efforts—Monitoring for ALB and EAB

Trapping for ALB

You may see monitoring traps for Asian Longhorned Beetle this summer and fall if you live in or near the regulated area in Worcester County. DCR, along with Penn State University and the USDA Forest Service, will place 585 traps in and around the Worcester quarantine area. DCR will place 375 traps using one type of lure that is most advanced and recently developed. Additionally, Penn State University and the USDA Forest Service will place 210 traps testing seven different lures. The lures are comprised of plant volatiles and pheromones and are not harmful to people. For more information on the traps, or to report one that has fallen to the ground, please contact 1-866-702-9938.



Trapping for EAB

The USDA funds trapping efforts around the country to monitor for presence of EAB. This year, DCR has put up 435 traps in ash trees in Massachusetts in every county, except Berkshire County. (Since Berkshire County is already quarantined for EAB, it was excluded from the 2013 trapping.) The traps are purple panel traps that are covered in glue and baited with two lures that are not harmful to people. Monitors will check the traps throughout the summer to look for EAB, and the traps will be up until the fall. If you see a trap that has fallen, try not touch it—the glue is very sticky. For more information on the traps or to report a fallen trap, contact DCR Forest Health, 413-253-1798 x204.



More Bug News

Lyme isn't the only tick-borne illness: Researchers find new bacterium

By Beth Daily

July 2, 2013—Patients who test negative for Lyme disease after a suspected tick bite could be suffering from a recently identified illness also spread by deer ticks, a team led by Massachusetts researchers reported Monday. The paper describes two patients, one in Massachusetts and one in New Jersey, who were initially suspected of having another tick-borne disease, but were instead found to have the new infection.

Published in the *Annals of Internal Medicine*, the findings underscore the increasing importance for doctors to think **about more than Lyme, the region's most common tick-borne disease**, when they see a patient who was or could have been bitten by a tick. The authors said the cases also may give a hint about why some patients who test negative for Lyme become sick with similar symptoms.

The new infection, caused by the bacterium *Borrelia miyamotoi*, is the fifth human disease known to be spread by blood-sucking deer ticks [black-legged ticks, *Ixodes scapularis*], which transmit disease largely in the spring and summer. The **big message is everyone who gets tested for Lyme disease should get [tested] for all five,** said Sam R. Telford III, a professor at Tufts Cummings School of Veterinary Medicine who studies tick-borne diseases and is one of the authors. Read the full story at [The Boston Globe](http://www.boston.com/news/health/2013/07/02/new-tick-borne-disease/).

THE CITIZEN FORESTER

Growing on Trees

From the Alliance for Community Trees (ACTrees)

Annual Member Meeting 11/5/13

Save the Date! Alliance for Community Trees continues its 20th year anniversary celebration during 2013 ACTrees Day in Pittsburgh, PA. Please join us on November 5, 2013, for this annual meeting of the ACTrees national members network. Presentations will include member and guest speakers, educators, and business professionals talking to the latest issues facing tree planting and care professionals. And, of course, the meeting will include time for networking.

What: ACTrees Day

When: Tuesday, November 5, 2013

Where: Westin Convention Center, Pittsburgh, PA
ACTrees members receive a discounted rate.

For more information, go to: <http://actrees.org/what-we-do/training-and-conferences/annual-meeting/>

October is National Neighbor-Woods Month

National NeighborWoods™ Month is the annual community service campaign and national celebration of community trees, which last year resulted in over 825 volunteer events delivered by local partners in over 290 cities across the country. Campaign partners planted 45,000 trees, engaged 23,000 volunteers, and educated the public about sustainability through education and media outreach.

If you will be holding an event this October, register your event to receive free gear from ACTrees and apply for a mini-grant to help make your event a success.

For more information, go to:

<http://neighborwoodsmoonh.org/>

The Alliance for Community Trees (ACTrees) is national non-profit organization that supports grassroots, citizen-based nonprofit organizations dedicated to urban and community tree planting, care, conservation, and education. It has over 200 member-organizations, and 44 states and Canada count themselves in its network.

From the Arbor Day Foundation

Partners in Community Forestry

National Conference, November 6-7, Pittsburgh, PA



The Partners in Community Forestry National Conference offers a platform for sharing best practices in urban forest partnerships, planning, and management, in addition to offering models of sustainability and innovation across all groups who serve community trees. The conference draws attendees from all over the country, from non-profit groups, local, state, and federal government, utilities, and others working in the field of urban forestry.

Some of the presentations include:

- A Community Tree Nursery Case Study
- Community Trees, Community Nutrition: Urban Forestry and Neighborhood Food Security
- Evaluating Ways to Encourage Residents to Water Street Trees
- **Started from the Bottom, Now We're Here: Building Long-Lasting Volunteer Programs through Community Partnerships**

Check out the full [conference agenda](http://www.arborday.org/shopping/pcf/2013/index.cfm) and get more information at <http://www.arborday.org/shopping/pcf/2013/index.cfm>

Coming Soon! Information on the Working Forest Initiative

Including new program: Foresters for the Birds

Growing on Trees

Forest Legacy Request for Proposal Now Available for Fiscal Year 2015

The Massachusetts Forest Legacy Program is now accepting project proposals for consideration in the Federal Fiscal Year 2015 appropriation process. Forest Legacy project proposals must be entered into the "Forest Legacy Information System" (FLIS) no later than 5:00 p.m. on September 16, 2013, for project proposals to be considered complete and eligible for review and ranking by the Massachusetts Forest Legacy Committee. The appropriate Forest Legacy Area Sponsor and the Massachusetts Forest Legacy Program Coordinator must also be notified, by e-mail, no later than 5:00 p.m. on September 16, 2013, that a Forest Legacy Project Proposal will be entered into FLIS by 5:00 p.m. on September 16, 2013. Project Proponents should work with the appropriate Forest Legacy Area Sponsor to complete the data entry into FLIS.

The Massachusetts Forest Legacy Program FY 2015 Request for Proposals announcement is posted at: <http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/forest-legacy-program.html>

For additional information or questions please contact: [Michael J. Fleming](#), MA Forest Legacy Program Coordinator, Department of Conservation and Recreation, 355 West Boylston Street, Clinton, MA 01510, Phone: 978-368-0126 x114 fax: 978-368-0217 Web: <http://www.mass.gov/eea/agencies/dcr/conservation/forestry-and-fire-control/forest-legacy-program.html>

DCR Urban and Community Forestry Challenge Grants

Deadline November 1

The next round for our Urban and Community Forestry Challenge Grants is fast approaching. Challenge grants are 50-50 matching grants (75-25 for environmental justice projects) to municipalities and non-profit groups in Massachusetts communities of all sizes for the purpose of building local capacity for excellent urban and community forestry at the local and regional level.

The USDA Forest Service provides funding for the grant program, and DCR administers the grants with guidance from the **Massachusetts Tree Wardens' and Foresters' Association**. The DCR Urban and Community Forestry Program assists communities and nonprofit groups in their efforts to protect and manage community trees and forest ecosystems, with the ultimate aim of improving the environment and enhancing livability of all of Massachusetts's communities.

For more information on the Challenge Grants (including our NSTAR Go Green grants and National Grid Partnership Grants) go to the [DCR website](#) or contact Mollie Freilicher 413-577-2966 or mollie.freilicher@state.ma.us.

[Click here](#) to explore the DCR Urban and Community Forestry Website

What's Happening on The Grove?

The Grove is an advertising-free, networking website that is a partnership between the USDA-Forest Service and the Georgia Urban Forest Council. Sign up for free and [join the Massachusetts Grove](#) and read about and post information on tree planting and urban forestry activities in your community. Share pictures or stories from events, network with other tree advocates, post information for an upcoming project, recruit volunteers, and learn about urban forestry activities in your state and around the country by joining The Grove.

Stories recently posted on the Grove:
[Instagram: The Latest Social Media Tool for Urban Foresters](#)
[Tree Risk Assessment Qualification Course is on Target](#)
[American Forests Introduces a Guide to Urban Forest Assessments](#)

Check in with the Grove as often as you like, or simply receive emails when we make updates to the Massachusetts Grove: www.massachusettsgrove.org.

Growing on Trees

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Drought stress is an especially serious condition for urban trees, which must contend with increasingly hotter and dryer conditions each year. The urban heat island effect produces much higher temperatures in cities than their suburban and rural counterparts. And street trees also often face poorer or compacted soils, poor drainage, contaminants such as salt, oils, and pet waste, a variety of pests, and root and trunk damage from construction, cars, and sidewalks.

[“Managing Drought Stress on Urban Trees,”](#) Tree Care Industry Magazine, explains just what happens when a tree is in distress as a result of drought, and appropriate treatments for a variety of symptoms. And from the City of Atlanta, [“Drought and Urban Trees,”](#) presents a few “do’s and don’ts” for prevention and care of urban trees under drought conditions.

When it comes to watering, check out three great ideas for keeping trees appropriately watered during the summer or other dry season:

- [Keeping Trees Watered: Dealing with Drought and Water Restrictions](#) (Trees Atlanta) — Trees Atlanta, in partnership with the city’s Department of Watershed Management, recycles the water flushed daily from fire hydrants to soak 3,000 downtown trees and hundreds in surrounding neighborhoods.
- [Keeping Trees Watered: Volunteer Mobilization](#) (Casey Trees) — Utilizing an extensive tree inventory and Geographic Information Systems (GIS) mapping, Casey Trees has created an efficient method for mobilizing volunteers to install Ooze Tubes to water trees during the summer.
- [Keeping Trees Watered: NeighborWoods Youth](#) (Keep Indianapolis Beautiful) — A Youth Tree Team helps maintain the trees planted each year on public lands such as schools, parks, and greenways and along highways. Using water donated by the local water company, the Youth Tree Team waters 500 trees each week during spring, summer, and fall seasons.

Finally, visit the National Weather Service [Climate Prediction Center website](#) for drought monitoring information. From the [Alliance for Community Trees](#).

News

Having Trouble Sourcing Trees? There’s a Reason for That

Washington, DC (June 7, 2013) — A recent feature article in *Landscape Architecture Magazine* highlights the growing problem of finding high-quality trees and plants. **It’s all the result of an up and down market that left the nursery industry battered.** Nursery production ramped up for an over-heated economy only to be hit by a four-year recession. Saplings had to be dumped and few new trees were planted. The outlook now is across-the-board shortages.

Unlike other types of plants, trees grow in multi-year cycles rather than just one season. So catching up will take several years, and likely make it difficult to source quality trees in the coming years. There is a particular scarcity of two- to three-inch caliper trees, and those that are available may have a high price tag. Available trees are also being shipped further, which can increase costs.

Here’s an excerpt from the article describing the situation:

The [nursery] industry topped out at \$175 billion, according to the consortium’s most recent report, in 2009, which collected data from the beginning of 2008, before the effects of the crash took hold. But just how much production and sales would fall over the next four years, and start to pick up again over the next few, is only being assessed this year for the survey to be published in 2014.

In the meantime, Charlie Hall, an agricultural economist based at Texas A&M University, who helped found the [Green Industry Research] consortium and who travels the country speaking and consulting for the industry, offered some estimates.

“Anecdotally speaking, roughly a quarter of our growers have exited the industry, and 40 percent of our landscape contractors,” says Hall, a professor and the Ellison Chair in International Floriculture at the university. “About 20 to 25 percent of garden centers have exited as well.” (That 40 percent drop in contractors includes the “mow-blow-and-go or have-truck-will-landscape” types, who get into business as easily as they get out.) “And my estimates may even be conservative.”

Although a few large growers didn’t stop production, many reduced plantings, some by 30 percent, others by 80 percent. And they dumped thousands of trees and shrubs, even though they knew that could mean shortages if the worst recession since the Great Depression ever ended.

With tree shortages looming, there’s a greater urgency to plan in advance, check for availability of desired spe-

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cific species for fall plantings, and have alternatives in mind. And expect perhaps to pay more. (From the Alliance for Community Trees) [Read the complete article, "Sold Out," by Anne Raver, in Landscape Architecture Magazine.](#)

Spring is for Tree Planting

The NorthWoods Conservation Corps spring field crew has completed six weeks of work on riparian buffer and flood plain forest restoration projects. A majority of the work was completed at five sites along the main stem of the Connecticut River from Maidstone, VT to Piermont, NH, with one project completed on the Wells River (a tributary of the CT River) in Newbury. Our forest stewardship staff completed additional plantings at four sites in the Black River watershed in northern Vermont.

This work was made possible through a number of partnerships and funding sources that included the Essex and Caledonia County Natural Resource Conservation Districts, the Natural Resource Conservation Service, US Fish and Wildlife Service, the Nature Conservancy, the Connecticut River Watershed Council, private landowners, the Town of Newbury, the CT River Mitigation and Enhancement Fund, and a Vermont DEC Ecosystem Restoration grant.

In total, over 6,000 trees and shrubs were planted, and 24 acres of riparian buffer and floodplain forest were restored. We also installed an additional 1,000 feet of willow fascines - bundles of willows partially buried in trenches that form a fast-growing row of willows. These efforts will not only re-establish valuable habitat, but are key to slowing erosion, protecting and improving water quality, and protecting farm land. (From the NorthWoods Stewardship Center. Thanks to Russ Cohen for passing along the article.)

Ailanthus Tree's Status as Invasive Species Offers Lesson in Human Interaction

June 24, 2013 — An exotic tree species that changed from prized possession to forest management nightmare serves as a lesson in the unpredictability of non-native species mixing with human interactions, according to researchers. "There are other invasive tree species in Pennsylvania, but the ailanthus, by far, has been here longer and does more damage than any other invasive tree," said Matthew Kasson, who received his doctorate in plant pathology and environmental microbiology from Penn State. "It's the number one cause of native regeneration failure in clearcuts in Pennsylvania." Read the complete story at [ScienceDaily](#).

Minneapolis homeowners blame root cuts for downed trees

By: Steve Brandt, June 25, 2013

Minneapolis residents are pointing their fingers at recently lain sidewalks as a culprit in their loss of boulevard trees during recent storms that toppled hundreds of trees across the Twin Cities.

They note that many of the fallen boulevard trees have a lighter-colored slab or two of replacement sidewalk next to them, meaning that crews likely severed tree roots before pouring concrete, making the trees less stable and more vulnerable to being uprooted.

"They cut these big roots off that were holding the trees up," said Darna Peterson, who lives in the Standish-

Ericsson neighborhood. And urban forest advocate Donald Willeke, who lives in the Cedar Isles Dean neighborhood, is urging the city to elevate the sidewalks to make room for the roots.

City officials acknowledge cutting the roots, but say it's a compromise between building sidewalks and preserving trees. But Mayor R.T. Rybak said Tuesday that he has asked public works officials to re-examine the sidewalk-tree balance to see whether the city can do more to favor the survivability of the trees. Read the full story at the [StarTribune.com](#)

Urban Trees Remove Fine Particulate Air Pollution, Save Lives

June 19, 2013 — In the first effort to estimate the overall impact of a city's urban forest on concentrations of fine particulate pollution (particulate matter less than 2.5 microns, or PM_{2.5}), a U.S. Forest Service and Davey Institute study found that urban trees and forests are saving an average of one life every year per city. In New York City, trees save an average of eight lives every year. Fine particulate air pollution has serious health effects, including premature mortality, pulmonary inflammation, accelerated atherosclerosis, and altered cardiac functions. In a study recently published on-line by the journal Environmental Pollution, researchers David Nowak and Robert Hoehn of the U.S. Forest Service and Satoshi Hirabayashi and Allison Bodine of the Davey Institute in Syracuse, N.Y., estimated how much fine particulate matter is removed by trees in ten cities, their impact on PM_{2.5} concentrations and associated values and impacts on human health. Read the complete story at [ScienceDaily](#).

On the Horizon

August Tree Check Month—Keep your eye to the trees for ALB and EAB

Aug 9 ISA Exam, Norway, ME, www.newenglandisa.org

Aug 9 Rain Gardens and More, Garden in the Woods, Framingham, MA, www.newfs.org

Aug 3-7 ISA International Conference, Toronto, Canada, www.isa-arbor.com

Sept 14 Landscape and Forest Tree and Shrub Disease Workshop, UMass-Amherst, UMass Extension <http://extension.umass.edu/landscape/> (waitlist)

Sept 16 Deadline: 2015 Forest Legacy Request for Proposals

Sept 20-22 NEC-ISA - 5th Annual [Women's Tree Climbing Workshop](http://www.newenglandisa.org) - Level 1 Beginners, Alton Jones Educational Camp, New Greenwich, RI, www.newenglandisa.org

Sept 25 Scouting for Disease & Weed Problems of Woody Ornamentals, UMass Extension, Hathorne, MA www.umassgreeninfo.org

Sep 28 Town Forests: Past and Present, Conference celebrating the 100-year anniversary of town forests in Massachusetts, Fitchburg, MA, www.massforestalliance.org/fitchburg

October National NeighborWoods Month www.actrees.org

Oct 1 Deadline for Intent to Apply for DCR Urban & Community Forestry Challenge Grants

Oct 4-5 Splicing workshop at Yale Cordage, New England Chapter International Society of Arboriculture, www.newenglandisa.org

Oct 25-26 **Save the Date!** Massachusetts Tree Steward Training, Harvard Forest, Petersham, MA—[Register here!](#)

Nov 1 Deadline: [DCR Urban & Community Forestry Challenge Grants](#)

Nov 3-5 New England Chapter-International Society of Arboriculture Annual Conference, Warwick, RI, <http://newenglandisa.org/>

Nov 4-5 Society of Municipal Arborists Annual Conference, Pittsburgh, PA, <http://www.urban-forestry.com/>

Nov 4-5 The Nature Conservancy Continental Dialogue, Pittsburgh, PA, <http://www.arborday.org/shopping/pcf/2013/event-natureconservancy.cfm>

Nov 5 ISA Exam, Warwick, RI, www.newenglandisa.org

Nov 5 ACTrees Annual Meeting, Pittsburgh, PA, <http://actrees.org/>

Nov 6-7 Partners in Community Forestry Conference, Pittsburgh, PA, www.arborday.org

Dec 31 Tree City USA, Tree Line USA, Tree Campus USA Applications Due

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Deval Patrick, Governor

Richard Sullivan, Secretary, Executive Office of Energy and Environmental Affairs

John P. Murray, Commissioner, Department of Conservation and Recreation

Peter Church, Director of Forest Stewardship, Department of Conservation and Recreation

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If you have a topic you'd like to see covered or want to submit an item to *The Citizen Forester* (article, photo, event listing, etc.), please contact [Mollie Freilicher](#) or click [here](#).

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